

XXXVIII. NOTES ON THE EXTENSION OF THE  
BLAINE GYPSUM IN OKLAHOMA,  
KANSAS AND TEXAS

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(Abstract of paper read in 1924)

As the result of a field conference held in January, 1924, under the direction of Mr. Hugh D. Miser of the United States Geological Survey and participated in by Dr. J. W. Beede, Dr. J. V. Howell, Messers. C. Don Hughes, R. W. Sawyer, F. W. Floyd and the writer, it has been determined that the Blaine gypsum extends much further southeast in Oklahoma than had previously been believed.

The Blaine had heretofore been traced from the upper Medicine River in Barber County, Kansas, southward across the state line into Woods County, Oklahoma, thence across the Cimarron River into Harper County, and from there southeastward between the Cimarron and North Canadian rivers through Woodward, Major, Blaine, and southwestern Kingfisher counties, and has been mapped as disappearing northwest of El Reno, in Canadian County.

The results of studies made by several geologists during the past few years, which were crystallized in the field conference referred to above, lead us to believe that the horizon of this gypsum may be traced southward across Canadian and Grady counties to a point near Bray in northeastern Stephens county where the line of outcrop turns west and may be followed across northern Stephens, northeastern Comanche, southwestern Caddo, northern Kiowa and southern Washita counties as far as Cedartop Mountain near the corner the four counties, Kiowa, Washita, Beckham and Greer. This is the type locality of the writer's old Greer formation. It is now known that the gypsum ledge in the "western area" of the Greer which extends from this point southward across Greer, Harmon and Jackson counties to Red River is the fact the Blaine. It was originally believed that the formations at Cedartop and southwestward could be correlated with the gypsum outcropping in eastern Washita and other counties, known as the "eastern area" of the Greer, but this supposition is now known to be in error. For these latter gypsums the name Cloud Chief has been proposed. At the same time the name Greer has been abandoned.

The gypsum bed originally known as the "western area" of the Greer, but now known to be the Blaine, has been traced from

Red River southwest into Texas to the region of San Angelo on the Concho River, a distance of about 200 miles. The total lie of outcrop the Blaine formation in Kansas, Oklahoma and Texas is more than 600 miles long, making it, so far as known, the longest continuous gypsum outcrop in the world.